AFYA YA TAIFA

Kenya National Health Vision

Kenya National Development Programme

Afya kwa Wakenya Wote. Tiba Mapema. Usalama Daima.

Health for All Kenyans. Early Treatment. Safety Always.

This document is Afya ya Taifa — the Kenya National Health Vision. It integrates three previously separate documents — the Kenya Health Vision, the Kenya National Ambulance Corps Act, and the Kenya Health Insurance Brief — into a single comprehensive architecture. It adds what was missing: the full Level Specification for each of the five hierarchy levels, the community and nomadic health programme design on the Cuban primary healthcare model, the mental health programme to EU standards, the pharmaceutical procurement reform, the insurance financial architecture on the NHS universal coverage model, and the twenty-year training and deployment pipeline. Every other programme document that references Afya ya Taifa references this document.

The design standards are drawn from three of the world's highest-performing health systems. Switzerland for spatial and equipment standards — the highest nurse density in the OECD at 18.8 per 1,000 population and the most rigorously designed hospital infrastructure in the world. Cuba for primary healthcare staffing ratios and community health doctrine — 1 physician per 175 people at primary level, the triple diagnosis (physical, psychological, social) at every clinical contact, and geographic empanelment that makes every family known to the health system before they are sick. And the United Kingdom's NHS for the insurance financing model — comprehensive, universal, free at point of delivery, funded through general taxation with progressive contributions.

These are 20-year trajectory standards. Kenya does not reach Swiss nurse density in Year 1. It reaches a credible interim standard in Year 1, a significant improvement by Year 10, and the full Swiss-equivalent by Year 20. The trajectory is honest. The destination is not negotiable.

SECTION ONE

The Diagnosis — Six Structural Failures

1.1 What Is Actually Broken

Kenya has hospitals. Kenya has doctors. Kenya has a health budget. What Kenya lacks is the reliable conversion of those inputs into actual health outcomes for every Kenyan — especially those furthest from Nairobi. The problem is not resources. It is architecture. The health system can be physically present and economically absent simultaneously: a functioning ambulance can deliver a patient to a Level 3 facility in forty minutes, and the bill that follows can destroy the family financially. Physical access without financial access is not universal health coverage. It is universal access to bankruptcy.

Failure	What It Means in Practice
1. Structural collapse from devolution	The old hierarchy — dispensary, health centre, district hospital, provincial hospital, national referral — worked as a system. The 2013 devolution gave Kenya 47 county health systems that do not talk to each other, and a national level that does not coordinate them. The referral logic that connected every level was severed. The hierarchy exists on paper. It does not function as a system. Every other investment in the health system — hospitals, equipment, doctors, insurance — is partially wasted without a functioning referral architecture.
2. Numbers and distribution	Kenya has approximately 1.1 doctors per 10,000 population — against Switzerland's 44.77 and Cuba's 67 per 10,000. But the aggregate figure disguises the distribution failure: 80% of Kenya's doctors work in Nairobi, Mombasa, and Kisumu, while the remaining 20% serve 85% of the population. This is not a workforce shortage. It is a workforce distribution failure caused by allowing market forces to determine deployment in a context where market forces always produce urban concentration. The national deployment system that posted junior doctors to Mandera on tour-of-duty rotations worked — but was weaponised as a political tool. Devolution transferred salary control to counties, replacing national career logic with county political arithmetic.
3. Facility appropriateness — the equipment graveyard	Every Kenyan county has a hospital with an ultrasound machine that has been broken for three years, a theatre that has not been used in four months because the anaesthetic machine has no calibration certificate, and an X-ray unit offline since the service contract expired. The problem is not purchasing — it is maintenance, clinical consumables supply, and the absence of a published minimum operational standard that creates legal accountability. The Level Specification in Section 3 creates that standard and makes it enforceable.
4. The Trust Loop	Patients bypass Levels 1–3 for Kenyatta because experience has taught them the lower levels fail. Kenyatta drowns in cases that

Failure	What It Means in Practice
	belong in Nakuru. Lower levels stay underfunded because nobody uses them — they stay underfunded because patients go to Kenyatta. The loop is self-reinforcing and it kills people: patients who die in transit to KNH from conditions that would have been safely managed at a functioning Level 3 facility 15 kilometres away. The Trust Loop is broken not by instruction but by capability — when Level 3 is genuinely capable of surgery, blood transfusion, and emergency obstetric care, and when patients' experience confirms that capability.
5. The insurance failure	NHIF collected premiums and created obligations it could not honour. SHIF has not resolved the structural problems that caused NHIF to fail. The core problem: you cannot design a health insurance scheme without first knowing what care costs at each facility. Without standardised facility costs, predictable referral routing, and population health data, insurance pricing is guesswork. The Level Specification solves the first problem. The KNAC solves the second. The 4,400 CHPs running household surveillance generate the population health data for the third. The insurance architecture in Section 9 is the design that was not previously possible.
6. The nomadic gap	Kenya's 4 million nomadic and semi-nomadic citizens — Turkana, Samburu, Borana, Maasai, Somali clans — fall entirely outside every fixed-infrastructure health model. The system has always required them to come to it. They move. The system has never reliably served them. This is not a gap at the margins. It is the structural exclusion of 4 million Kenyans from the national health system. The nomadic programme in Section 6 is the design that makes the state follow the people.

SECTION TWO

The Architecture — Doctrine and Design Principles

2.1 Five Doctrinal Statements

The Doctrine

ONE — THE AMBULANCE IS THE CONNECTIVE TISSUE. The five-level hierarchy is theoretical without an ambulance service that enforces the referral pathway — routing every patient to the appropriate level based on clinical assessment at scene, not patient preference or geographic proximity. Treatment begins at dispatch, not at hospital arrival.

TWO — THE LEVEL SPECIFICATION IS THE LOCK. Every level has a published minimum staffing, equipment, and service standard. A facility that does not meet its level specification is not a functional facility — it is a building. The Level Specification is what makes the insurance scheme actuarially possible, makes KNAC referral routing clinically meaningful, and makes patient trust in lower levels justified.

THREE — THE TRUST LOOP IS BROKEN BY CAPABILITY, NOT INSTRUCTION. Patients cannot be instructed to use facilities that do not work. Build genuine capability at Level 3 first. Communicate it second. Enforce the pathway third. The investment sequence follows from this.

FOUR — THE CUBAN PRIMARY HEALTH DOCTRINE. Every family in Kenya is known to the health system before they are sick. Geographic empanelment — the CHP knows every household in their ward catchment — means the system knows who has hypertension, who is pregnant, whose child needs a vaccination, and who is at risk before any situation reaches emergency. Prevention is not an add-on. It is the primary function of Levels 1 and 2.

FIVE — UNIVERSAL COVERAGE IS NOT GENEROSITY. IT IS THE CONDITION UNDER WHICH EVERYTHING ELSE WORKS. The system that saves your life must not be the system that ruins it. The NHS principle — comprehensive, universal, free at point of delivery — is the financial architecture goal. The pathway to it is designed honestly in Section 9.

2.2 The Three Design Standards

System	What Kenya Adopts	What Kenya Adapts for its Trajectory
Switzerland — Spatial and Equipment	Swiss hospital spatial standard: single-patient rooms as norm; minimum 2,700mm ceiling height in patient areas (3,000mm recommended); 16m² minimum per inpatient bed including ensuite; ICU minimum 25m² per	Kenya builds to the Swiss spatial standard at every new or rebuilt facility from Year 1 — embedded in the KSBC Design Studio's Level 3 and Level 4 type designs. Year 1 nurse density target of 4.5 per 1,000 is 24% of the Swiss

System	What Kenya Adopts	What Kenya Adapts for its Trajectory
	bed space; operating theatre minimum 42m²; universal room design with standardised medical gas outlet positions and casework. Swiss nurse density target: 18.8 nurses per 1,000 population — the Year 20 goal.	standard — honest about the gap, committed to the direction.
Cuba — Primary Healthcare	Cuban consultorio model: 1 physician + 1 nurse per 600–700 patients (150 families), geographically empanelled. Triple diagnosis at every contact: physical, psychological, social. Biannual neighbourhood health diagnosis. Polyclinic serving 20,000–40,000 population with 22 services. 97% of medical graduates serve as primary care physicians for minimum 3 years before specialist training.	Kenya's CHP-Clinical Officer pair serves 2,500–3,000 patients per ward — a slightly larger panel than Cuba, reflecting Kenya's trajectory. Geographic empanelment and household surveillance principles are non-negotiable. The 97% primary care service requirement becomes Kenya's 3-year mandatory district service before specialist rotation.
United Kingdom NHS — Insurance and Financing	Comprehensive, universal, free at point of delivery. General taxation funding with National Insurance contributions as a ring-fenced element — progressive contribution, not premium-based. No charge at point of use. Cost-based facility payment, not fee-for-service. The founding principle: services should be comprehensive, universal, and free at the point of delivery.	47-county Integrated County Health Board (ICHB) commissioning architecture. NHS general taxation model becomes Kenya's dedicated health levy (2% of VAT revenue ring-fenced) plus employer and employee contributions via mobile-money-compatible payroll. Catastrophic expenditure cap: no household pays more than 8% of annual income on health costs in any year.

SECTION THREE

The Five-Level Referral Hierarchy — Level Specification

3.1 Overview

The five levels of Kenya's health system are not a classification. They are a design specification. Each level is defined by a minimum staffing establishment, equipment list, spatial standard, service capability, governance model, and performance standard. A facility that does not meet its level specification is classified at the level it actually meets — not the level it is labelled. The KSBC Building Standards Institute inspects every facility every three years. The Ministry of Health publishes a live compliance dashboard accessible to the public.

Level	Population and Core Function
L1 — Dispensary (1,450+ nationally, one per ward)	First clinical contact. Catchment 2,500–6,000 persons. Primary care, immunisation, antenatal care, basic treatment, contraception, health surveillance, referral initiation. CHP anchor. Open 8am–6pm Monday–Saturday. KNAC Ward Dispatch Node co-located.
L2 — Health Centre / Polyclinic (~2,500 nationally)	Catchment 10,000–30,000 persons. Maternity (normal delivery, active management of third stage), minor surgery, basic laboratory, digital X-ray, family planning, outpatient specialist consultations. 24-hour maternity. KNAC ambulance anchor point.
L3 — Sub-County Hospital (290 nationally, one per sub-county)	THE SYSTEM PIVOT. Catchment 50,000–300,000. Full surgery including emergency C-section, appendicectomy, laparotomy. Blood bank and transfusion. Full laboratory. Digital X-ray, ultrasound. High-dependency care. Inpatient medicine, surgery, paediatrics, obstetrics. When this level works, the Trust Loop breaks.
L4 — County Referral Hospital (47 nationally, one per county)	Catchment 200,000–2,000,000. Specialist care: internal medicine, general surgery, orthopaedics, obstetrics and gynaecology, paediatrics, ophthalmology, ENT, psychiatry, oncology day-case, renal dialysis, CT scan, MRI (Year 10), ICU. Blood bank with component therapy.
L5 — National Referral (3 nationally)	Kenyatta National Hospital (Nairobi), Moi Teaching and Referral Hospital (Eldoret), Northern National Referral Hospital (Isiolo — new build, Year 5). Neurosurgery, cardiac surgery, renal transplant, bone marrow transplant, advanced oncology (radiotherapy, complex chemotherapy), complex burns, complex trauma. Research and teaching mandate.

3.2 The Hybrid Governance Model

Devolution cannot be reversed and should not be. But health cannot be 47 isolated county systems. The hybrid model resolves this by separating the functions of paying, setting standards, and deploying — assigning each to the level best placed to perform it:

Level	Salary Paid by	Standards Set by	Deployment Governed by
L1–L2 — Primary care	County government	National Ministry of Health (Level Specification)	County — local knowledge, accountability to county residents
L3 — Sub-county hospital	Joint: county pays clinical support staff, national pays medical officers and specialists	National Ministry of Health	Statutory Deployment Formula — national formula, not ministerial discretion
L4 — County referral	National government pays all resident specialists; county pays nursing, allied health, support	National Ministry of Health	National deployment pipeline: specialists posted by Statutory Deployment Formula
L5 — National referral	100% national government	National Ministry of Health	National — these are national assets, not county assets

3.3 Level 1 — Dispensary — Full Specification

Element	Standard
Spatial standard — KSBC Level 1 Type	280m² minimum total floor area. Consultation rooms × 2 (14m² each). Treatment/dressing room (12m²). Observation bay — 3 beds (40m²). Maternity first-stage bay — 1 bed (18m²). Utility and sluice. Waiting area (30m² minimum, covered outdoor overflow). CHP office and motorcycle bay. Separate male/female toilets. WHO-standard handwashing at every clinical room entry. Roof water harvesting (10,000 litre tank). Solar primary power with grid secondary. Ceiling height minimum 3,000mm throughout.
Staffing (Cuban consultorio model — Year 1)	1 Clinical Officer (KNQF Level 6). 1 Registered Community Nurse (KNQF Level 5). 1 Community Health Paramedic (KNAC-employed, based here). 1 Community Nurse Assistant (KNQF Level 3). 1 Health Records Officer (KNQF Level 3). Total: 5 staff. Patient panel: 2,500–3,000. Year 20 target: add a second Clinical Officer and a Social Health Worker to approach Cuban consultorio ratio.

Element	Standard
Equipment minimum	Examination couch × 2. Sphygmomanometer × 2, thermometers × 4, pulse oximeters × 2, fetoscope, Doppler handheld fetal monitor, glucometer × 2, microscope, centrifuge. Rapid diagnostic tests: malaria, HIV, pregnancy. Haemoglobin meter. Oxygen concentrator × 1. Suction unit. Basic surgical set. Autoclave. Vaccine refrigerator (solar-powered). Weighing scales (adult and infant). MUAC tapes × 4. Kenya Essential Medicines List Level 1 formulary.
Service capability	Outpatient consultation (all within Clinical Officer scope). Full EPI immunisation. ANC visits 1–6, PMTCT. Family planning including LARC insertion. Malaria, URTI, diarrhoea, simple wounds, STI, TB treatment supervision (DOTS), nutritional supplementation. Growth monitoring. Referral initiation via KNAC dispatch node. Health data recording in Community Health Information System.
Performance standard	≥90% of under-5s in ward fully immunised. ≥90% of pregnant women with ≥4 ANC visits. Monthly data submission within 5 days. Annual Level Specification compliance certificate.

3.4 Level 2 — Health Centre — Full Specification

Element	Standard
Spatial standard — KSBC Level 2 Type	850m² minimum total floor area on 1–2 levels. Consultation rooms × 4 (14m² each). Procedure room (18m²). Laboratory (22m²). X-ray room (25m², lead-lined). Outpatient waiting (80m²). Maternity zone: 4 labour beds + 2 delivery beds + 4 postnatal beds (200m² total). Male and female wards — 8 beds each (80m² each, standard 4-bed bays). Pharmacy (20m²). Minor theatre/dressing (25m²). Ambulance bay (covered, 40m²). Solar array minimum 15 kW. Water storage 20,000 litres. Standby generator. Waste management compound. Ceiling height 3,000mm clinical areas.
Staffing (Year 1 — Cuban polyclinic adapted)	1 Medical Officer (MBChB, KNQF Level 7) in-charge. 2 Clinical Officers. 1 Registered Midwife (KNQF Level 5–6). 4 Registered Nurses (KNQF Level 5). 2 Community Nurse Assistants (KNQF Level 3). 1 Laboratory Technician (KNQF Level 5). 1 Radiographer (KNQF Level 5). 1 Pharmaceutical Technologist (KNQF Level 5). 1 Nutritionist (KNQF Level 5). 2 Health Records Officers. 2 KNAC-attached CHPs. Total: 18 clinical and records staff. Year 10 additions: Physiotherapist, Mental Health Community Nurse, Social Health Worker.
Equipment minimum	Digital X-ray unit. Obstetric and abdominal ultrasound. Automated FBC analyser. Clinical chemistry analyser (glucose, creatinine, electrolytes, LFTs). Urine analyser. HIV and syphilis rapid tests. Autoclave. Oxygen concentrators × 2 plus cylinder backup. Suction units × 2. Neonatal resuscitaire. Electronic foetal monitor. Vacuum extractor. MVA set. Infusion

Element	Standard
	pumps × 4. Pulse oximeters × 6. ECG machine. Vaccine cold room (solar-primary). Blood pressure machines × 6.
Service capability	All Level 1 services plus: normal delivery and AMTSL, management of PPH and eclampsia prior to referral, neonatal resuscitation, basic surgery (incision and drainage, wound repair, circumcision, vasectomy, tubal ligation), full laboratory, digital X-ray, ultrasound (obstetric and abdominal), day admission for IV hydration and antibiotics, dental basic, physiotherapy basic, monthly outreach to each Level 1 in catchment by visiting Clinical Officer.
24-hour requirements	Maternity unit — 24 hours mandatory. Emergency consultation — 24 hours mandatory. All other services minimum 8am–8pm, 7 days.
Performance standard	100% of deliveries attended by skilled birth attendant. Maternal death from PPH without documented oxytocin administration: automatic reportable adverse event. Quarterly Level Specification review.

3.5 Level 3 — Sub-County Hospital — Full Specification

The Level 3 facility is the system's pivot. When it works — with theatres that function, blood banks that have blood, laboratories that return results in 4 hours — patients stop bypassing it for Kenyatta. The Trust Loop breaks mechanically. KSBC designs and builds every Level 3 to the Swiss spatial standard. KRCC provides the access road. The KNAC designates every Level 3 as a primary receiving facility.

Element	Standard
Spatial standard — KSBC Level 3 Hospital Type	3,500m² minimum on 2 levels, designed for modular expansion to 5,000m². Swiss single-patient room standard applied to: surgical ward (minimum 60% single rooms), obstetric ward (100% single rooms — every delivery in a private room), HDU (100% single bays, 25m² minimum per bay). Multi-bed bays (4-bed maximum, 30m² per 4-bed bay) for medical and paediatric wards. Ceiling height 3,000mm throughout clinical areas. Corridors minimum 2,400mm clear width. Operating theatre 42m² (Swiss standard). Theatre changing, scrub, and anaesthetic preparation rooms standard. Separate emergency and theatre entrances. Covered ambulance bay (4 spaces). Standby generator (99.95% uptime — Nishati specification: grid + UPS + 7-day fuel). Solar array minimum 50 kW. Water storage 100,000 litres. Medical waste autoclave and shredder on-site.
Bed establishment — Year 1	100–150 beds total. Medical ward: 30 beds. Surgical ward: 25 beds (including 4 HDU). Obstetric: 20 beds (8 antenatal + 8 postnatal + 4 HDU obstetric). Paediatric: 15 beds (including 4 neonatal cots, 2 HDU paediatric). Emergency observation: 6

Element	Standard
	beds. HDU: 4 beds integrated into surgical/obstetric. Year 10 target: 150 beds with standalone 8-bed HDU.
Staffing — Year 1 (Swiss-adapted Cuban model)	Medical: 3 Medical Officers (MBChB, KNQF Level 7) minimum; 1 Medical Superintendent (MBChB + management qualification); visiting specialist roster minimum 2 visits per week per specialty (internal medicine, paediatrics, OBGyn, general surgery). Nursing: 2.5 registered nurses per occupied bed across 3 shifts — for 100 beds: total nursing establishment of 75 registered nurses + 25 nurse assistants. Allied health: 2 Laboratory Scientists + 2 Technicians; 2 Radiographers; 1 Pharmacist + 2 Pharmaceutical Technologists; 1 Physiotherapist; 1 Nutritionist; 1 Social Health Worker; Medical Records Manager + 2 officers. Total establishment: 120–140 FTE. Year 10: resident OBGyn, paediatrician, and anaesthetist.
Operating theatres	2 theatres (42m² each, Swiss standard). Theatre 1: general and obstetric surgery — C-section within 30 minutes of decision, 24 hours per day. Theatre 2: elective general surgery. Each: WHO-standard anaesthetic machine with ventilator and monitoring, surgical light, electrosurgical unit, suction, mayo trolleys. HEPA-filtered ventilation minimum 20 air changes/hour. Recovery: 4-bed bay adjacent. Year 1 anaesthesia: 1 Anaesthetic Clinical Officer per theatre per session. Year 5 target: 1 Registered Anaesthetist at each Level 3.
Laboratory	Full haematology (FBC, blood film, ESR, coagulation). Full biochemistry (electrolytes, renal, liver, glucose, lipids, HbA1c, TSH). Microbiology (gram stain, culture and sensitivity). Blood bank: ABO/Rh typing, cross-match, antibody screening. Stock: minimum 10 units packed red cells, 6 FFP, 4 platelets at all times with 24-hour restocking. HIV, hepatitis B, syphilis, malaria. CD4 count (Year 3). Histopathology: tissue preservation for dispatch to Level 4 lab.
Diagnostic imaging	Digital X-ray (chest, abdomen, limbs, skull). Ultrasound × 2 (1 dedicated obstetric, 1 general). CT scanner: Year 5 target for all Level 3. Teleradiology link to Level 4 radiologist for reporting.
Performance standard	C-section decision-to-incision within 30 minutes, 24/7. Blood available for transfusion within 30 minutes. Urgent laboratory results (FBC, blood group, cross-match, malaria) within 2 hours. Theatre utilisation minimum 80%. Maternal death from amenable cause: zero, monitored quarterly, published publicly. Hospital-acquired infection rate below 5%.

3.6 Level 4 — County Referral Hospital — Full Specification

Element	Standard
Spatial standard	8,000m² minimum on 3–4 levels. All Level 3 standards enhanced. ICU: 8 beds minimum at 25m² per bed space (Swiss ICU standard). Each ICU bay: electric ICU bed, ventilator, defibrillator (1 per 4 beds), cardiac monitor with central station, infusion pumps × 4, suction, HEPA-filtered air (minimum 15 air changes/hour), negative pressure isolation capability for 2 rooms. Operating theatres × 4: 2 general/obstetric, 1 orthopaedic/specialised, 1 clean (for implant surgery). Endoscopy suite. Radiology department: CT scan room, MRI room (Year 10), fluoroscopy. Oncology day ward (8 chairs minimum for IV chemotherapy). Renal dialysis unit (6 stations minimum). Psychiatric inpatient unit (15 beds minimum, EU deinstitutionalisation design standard: individual rooms, therapeutic environment, garden access, no institutional corridor design). Rehabilitation ward (12 beds). Teaching facilities: lecture room, simulation room (Year 5). Specialist on-call accommodation.
Staffing — Year 1 (Swiss-adapted Cuban model)	Resident specialists (all nationally deployed): Internal Medicine Physician × 2, General Surgeon × 2, OBGyn × 2, Paediatrician × 2, Anaesthetist × 2. Year 3 mandatory additions: Orthopaedic Surgeon, Ophthalmologist, ENT Surgeon, Psychiatrist, Radiologist, Clinical Pathologist. Year 5 additions: Oncologist (shared with adjacent county where necessary), Nephrologist (for dialysis programme), Cardiologist. Total medical staff by Year 5: minimum 15 resident specialists + 8 Medical Officers + 6 Interns. Nursing: 2.5 nurses per occupied inpatient bed; ICU 1:1 nurse-to-patient ratio. For 200-bed hospital with 8 ICU beds: approximately 200 registered nurses + 75 nurse assistants + 24 ICU-specialist nurses. Allied health: clinical psychologist × 1, physiotherapist × 2, occupational therapist × 1, speech therapist × 1, social worker × 2, nutritionist × 2. Hospital management: CEO (health management qualification), Finance, HR, Facilities, Quality Manager.
Dialysis programme	6 haemodialysis stations minimum operated by renal technician + nurse under nephrologist supervision. Target: 3 sessions per station per day, 6 days per week = 18 sessions per day per county. Peritoneal dialysis programme offered alongside haemodialysis. Renal nutrition counselling for all dialysis patients. Transplant preparation for patients meeting criteria — transfer to Level 5 for transplant.
Oncology day programme	8 IV chemotherapy chairs minimum. Cytotoxic reconstitution unit (dedicated laminar-flow cabinet — safety standard for chemotherapy preparation). Oncology nurse (minimum 2 trained in chemotherapy administration). Visiting oncologist minimum 2 days per week (Year 1–3); resident oncologist (Year 5 target). Palliative care team: 1 palliative care physician or trained clinical officer, 1 palliative care nurse, 1 social worker, linkage to community palliative care programme. Oral chemotherapy dispensing under pharmacist supervision.

Element	Standard
Psychiatric inpatient unit	15 beds minimum, EU mental health design standard (individual rooms, natural light, garden, therapeutic common areas). Acute admission: patients in acute psychiatric crisis (psychosis, mania, severe depression with safety risk, first episode psychosis). Staffing: 1 Psychiatrist (nationally deployed from Year 1), 2 Mental Health Clinical Officers, 4 Mental Health Nurses, 1 Occupational Therapist, 1 Psychologist, 1 Social Worker. Community psychiatric nurse team: 3 nurses providing outreach to former inpatients and community mental health cases — the EU community care model of transitioning care from institution to community.
C-section and surgical standards	C-section within 30 minutes of decision, 24 hours per day — as per Jinsia ARC AFY/2. ICU available for post-operative critical care. Level 4 is the surgical safety net for Level 3 emergency transfers. Quarterly maternal mortality audit with public reporting.
Performance standard	ICU occupancy and outcomes published monthly. Oncology waiting time (referral to first treatment) maximum 4 weeks for systemic therapy. Dialysis: access within 2 weeks of confirmed renal failure diagnosis. Mental health: acute admission within 24 hours of confirmed emergency. Maternal mortality: published quarterly.

3.7 Level 5 — National Referral — Full Specification

Three national referral facilities: Kenyatta National Hospital (Nairobi), Moi Teaching and Referral Hospital (Eldoret), and the Northern National Referral Hospital (Isiolo — new build, commissioned Year 5). The Northern facility addresses the fundamental geographic inequity in the Level 5 system: a patient from Turkana or Mandera requiring neurosurgery currently travels to Nairobi. The Isiolo facility — positioned at the convergence of the LAPSSET corridor, the KRC Isiolo Inland Depot, and the central ASAL region — is within KNAC helicopter range of northern Kenya, South Sudan, and southern Ethiopia.

Element	Standard
Services — Kenyatta National Hospital (KNH)	Neurosurgery (including paediatric neurosurgery). Cardiac surgery (open heart, CABG, valve). Renal transplant (living and deceased donor). Bone marrow transplant. Advanced oncology: radiotherapy (linear accelerator), complex chemotherapy protocols, haematological malignancies. Complex burns (burns unit minimum 20 beds, burns ITU). Complex trauma (Level 1 trauma centre standard). Maxillofacial surgery. Plastic and reconstructive surgery. Nuclear medicine (PET scan, SPECT). Liver transplant (Year 10 target). Teaching hospital: undergraduate medical, nursing, and allied health training for UoN, KCH, and affiliated colleges.

Element	Standard
Services — Moi Teaching and Referral Hospital (MTRH)	Full Level 5 capability serving the Western Kenya and Rift Valley catchment. Cardiothoracic surgery. Neurosurgery. Oncology (radiotherapy). Burns unit. Renal transplant. Research mandate: Moi University School of Medicine embedded. AMPATH (Academic Model Providing Access to Healthcare) research partnership maintained and expanded.
Services — Northern National Referral Hospital, Isiolo (new build, Year 5)	Full Level 5 equivalent for northern Kenya, serving Turkana, Marsabit, Samburu, Wajir, Mandera, Garissa, Isiolo, and cross-border KNAC transfers from South Sudan and Ethiopia. Services: neurosurgery (head injury is the primary trauma pattern in ASAL road accidents), cardiac (rheumatic heart disease from untreated GAS infection is high-burden in the north), complex obstetrics, burns, trauma. KNAC helicopter base co-located — the national helicopter network's northern hub.
Spatial standard — KSBC Level 5 Type	15,000m² minimum for each of KNH and MTRH rebuilds (both are substantially below this — the rebuild programme is phased). Northern NRH: 10,000m² new build. ICU: minimum 30 beds (KNH/MTRH), 20 beds (Northern). All ICU spaces to Swiss 25m² minimum standard with full monitoring, ventilator support, and isolation capability. Operating theatres: minimum 8 (KNH/MTRH), 6 (Northern). All to Swiss 42m² standard with laminar-flow in at least 4 theatres. Burns unit: individual isolation rooms, positive and negative pressure capability. Radiotherapy vault: radiation shielded to IAEA standards.
Staffing	Each Level 5 facility: minimum 20 consultant-level specialists across the required subspecialties. A consultant-to-patient ratio consistent with the Swiss model of 4.5 physicians per 1,000 inpatient bed-days. Nursing: Swiss standard ICU (1:1 nurse:patient), surgical wards 2.5 nurses per bed, medical wards 2.0 nurses per bed. Each Level 5 employs a minimum of 500 nursing staff. Allied health: full complement including medical physicist (for radiotherapy), transplant coordinator, oncology pharmacist, and clinical perfusionist (for cardiac surgery).
Research and teaching mandate	All three Level 5 facilities are accredited postgraduate medical training centres. Every specialist training programme in Kenya (medical and surgical subspecialties, psychiatry, radiology, pathology) has at least one accredited centre at a Level 5 facility. University of Nairobi, Moi University, and the proposed Northern Medical University (Isiolo) have embedded clinical schools. Research publications from all three facilities contribute to the EARUC (East African Research Universities Consortium) joint research output.

SECTION FOUR

The Statutory Deployment Formula

4.1 The Problem the Formula Solves

The specialist who posts to Mandera is doing so because the formula says they must — not because a minister asked them to, not because a county governor hired them, and not because the market decided their skills are worth more in Nairobi. The formula removes the lever that was weaponised. It does so by making remote posting not a sacrifice but a career advancement mechanism: the Mandera posting is desirable because it guarantees the specialist training slot that follows.

The formula applies to all medical officers, specialists, and allied health professionals employed on the national health establishment — Levels 3, 4, and 5 staff whose salaries are paid by the national government. County-employed staff at Levels 1 and 2 are governed by county deployment within nationally-set standards. The formula is published, binding, and managed by the Health Workforce Directorate which is independent of ministerial interference on the same terms as the KNAC Director-General.

Formula Element	Design
The Vacancy Register	The Health Workforce Directorate maintains a live Vacancy Register — every funded post at every Level 3, 4, and 5 facility in Kenya, with its current fill status, the date it was last filled, and the three-year projection of when the current occupant's rotation ends. The Register is public. Every medical graduate, every intern completing their internship, and every specialist completing their training can see every vacancy in the country in real time. Opacity is the mechanism of manipulation. The Register removes it.
The Hardship Gradient	Every sub-county and county in Kenya is classified on a hardship gradient from Grade 1 (Nairobi urban) to Grade 5 (remote ASAL, nomadic counties: Turkana, Marsabit, Mandera, Wajir, Garissa, Samburu, West Pokot). The gradient determines the career acceleration attached to each posting. A Grade 5 posting for 3 years earns 5 years of career credit — the equivalent of 5 years of service in terms of seniority, specialist training access, and pension accrual. A Grade 1 posting earns 1 year of credit per year served.
The Specialist Training Slot Guarantee	Every medical officer who completes a Grade 4 or Grade 5 tour-of-duty posting (minimum 2 years) is guaranteed a specialist training slot within 18 months of the end of the posting. The guarantee is statutory — it cannot be overridden by institutional capacity constraints. If the training institution cannot accommodate the guaranteed slot, it must expand intake. This is the incentive that makes Grade 5 postings desirable: the Mandera posting is the fastest route to specialist training for a medical officer who wants to specialise.
Centrally randomised	New graduates entering the national health establishment are

Formula Element	Design
allocation	allocated to vacancies through a centralised randomised system. The randomisation operates within constraints: (a) language preference (a Swahili-dominant graduate is allocated to a Swahili-dominant community with higher probability than a Dholuo-dominant community); (b) proximity preference (within 400km of home region is weighted at 30% higher probability); (c) specialty match (allied health professionals are matched to the specific specialty vacancy). Within these constraints, the allocation is random — not merit-based, not politically influenced, and not marketable.
The 3-year mandatory district service	Every new medical graduate (MBChB and equivalent) serves a minimum 3 years at Level 3 or below before applying for specialist training — the Cuban model adapted. The 3 years: Year 1 as intern (existing system), Years 2–3 as medical officer at Level 2 or 3. This is not punitive. It is the system's investment in its own future: the medical officer who has managed a complicated delivery in a sub-county hospital with no specialist backup is a better specialist than the medical officer who went directly to postgraduate training. Years 2–3 count toward the Hardship Gradient credit.
Incentive package at Grade 4–5 postings	Remote posting allowance: 40–60% additional salary. Medical equipment allowance: Ksh 100,000 per year for personal professional equipment (stethoscope, otoscope, diagnostic equipment specific to their specialty). Children's education allowance: full secondary school boarding fees at national school for up to 3 children while the parent is on remote posting. Annual paid return flight home (international standard for humanitarian deployment). Security briefing and KDF emergency evacuation protocol for postings in conflict-adjacent counties.

SECTION FIVE

The Kenya National Ambulance Corps — Integrated

The Kenya National Ambulance Corps is established by the KNAC Corps Act, which is a separate legislative instrument incorporated by reference into this vision as if set out in full. This section summarises the Corps architecture for the purposes of the Afya ya Taifa programme. The operative legal text is in the KNAC Corps Act.

5.1 The Doctrine — Connective Tissue

The KNAC Doctrine

The ambulance is not emergency transport. It is the first clinical contact in the referral chain and the physical enforcement mechanism of the five-level hierarchy. Treatment begins at dispatch — not at hospital arrival. The outcome clock starts when the crew receives the call.

The Corps does not provide transport. It provides the first clinical intervention in the referral sequence. The crew makes the triage decision at scene. They deliver every patient to the correct level for their condition — not to the nearest facility, not to Kenyatta by default, but to the right level as determined by clinical assessment. The bypass problem is solved mechanically.

The ambulance is the connective tissue that makes the referral logic real rather than theoretical. Every other investment in the health system — the hospitals, the doctors, the equipment — is partially wasted when patients cannot reliably reach it.

Motto: Tiba Mapema. Usalama Daima. — Early Treatment. Safety Always.

5.2 The Fleet

Asset	Number	Role and Deployment
Standard ALS ambulance (Advanced Life Support)	2,200	Urban and peri-urban deployment. Dispensary and health centre anchored — distributed across the catchment, not held in central depots. Full ALS capability: advanced airway management, IV access, drug administration, cardiac monitoring and defibrillation, obstetric emergency management, trauma.
4×4 all-terrain ALS unit	400	Remote and ASAL counties. Full ALS capability in a robust chassis capable of seasonal track surfaces. Electric vehicle transition programme from Year 7. These are the primary response unit in Turkana, Marsabit, Wajir, Mandera, Garissa, and the remote sections of all highland counties.
Helicopter — night-	40	Level 3 to Level 4 and Level 5 critical transfers.

Asset	Number	Role and Deployment
capable, instrument-flight-rated		Scene response where ground transport cannot achieve the applicable Response Time Standard. 20 bases × 2 aircraft, dispersed across the country. KAF airspace coordination agreement (Ulinzi ya Taifa — KNAC air wing airspace protocol). Night operations with KAF mobile landing zone illumination support.
Fixed-wing aircraft	8	Long-distance critical transfer: Turkana–Nairobi, Mandera–Mombasa, Lodwar–Eldoret. Wilson Airport as national hub plus bases at Eldoret, Kisumu, Malindi, Lodwar, and Garissa.
Marine emergency response vessel	12	Lake Victoria island communities and the Kenya coast. Bases at Mbita, Homa Bay, Kisumu, Mombasa, Lamu, and Malindi.
TOTAL FLEET	2,650	At establishment. The Director-General reviews and may increase minimum fleet numbers every three years but may not reduce them below these minima without a resolution of the National Assembly.

5.3 The Response Time Standard — Statutory, Not Policy

Zone	Standard and Consequence of Breach
Urban — 20 minutes	Nairobi, Mombasa, Kisumu, Nakuru, and any county the Director-General designates by order. A county whose formation fails to meet the Urban standard in two consecutive months receives a Performance Improvement Notice. Failure in 6+ months in any 12-month period triggers joint review with authority to redirect county health allocations to Corps operational costs.
Peri-Urban — 45 minutes	Medium-density counties accessible terrain — all counties not classified Urban or Remote. Same enforcement mechanism. Response time data published monthly per county on the public digital platform.
Remote — 60 minutes	Arid, semi-arid, mountainous, or sparsely populated terrain: Turkana, Marsabit, Mandera, Wajir, Garissa, West Pokot, Samburu, and designated counties. The 60-minute standard triggers helicopter dispatch automatically where ground transport cannot achieve it or where clinical severity indicates that transport time materially affects patient outcome.

5.4 The Dispatch Architecture — Four Tiers

Dispatch Level	Function
Ward Dispatch Node	Automated GPS-linked call routing and unit coordination at ward level. Lean, possibly unstaffed in sedentary areas. Electronic link to all superior tiers in real time. A unit committed at ward level is visible at all superior tiers within 30 seconds.
Sub-County Dispatch Centre	Staffed. Clinical oversight. Multi-unit coordination. Complex triage. Handles cases requiring coordination of multiple units or clinical decision-making beyond the automated system. Escalates automatically to county level when the nearest unit cannot achieve the applicable Response Time Standard.
County Dispatch Command	Full operations room. Air asset coordination. Mass casualty incident management. Interfaces with Level 4 hospital receiving capacity and with the KAF air wing coordination protocol. 47 county commands, each staffed 24 hours.
National Emergency Operations Centre (NEOC)	National command. Cross-county transfer coordination. Air wing national dispatch. Real-time performance monitoring — response times, fleet availability, and active mass casualty incidents all published publicly in real time. Redundant architecture: primary NEOC in Nairobi, secondary NEOC at undisclosed location, county commands capable of autonomous operation for 72 hours if national connectivity lost.

5.5 Personnel Standards

Every Corps ground crew member holds a valid paramedic certification issued or recognised by the Corps. The minimum paramedic standard requires demonstrated competency in: advanced airway management including endotracheal intubation and surgical airway; intravenous and intraosseous access; drug administration including analgesics, cardiac medications, anticonvulsants, and obstetric emergency medications; 12-lead ECG acquisition and interpretation; obstetric emergency management including emergency delivery and post-partum haemorrhage; major trauma management including haemorrhage control, tension pneumothorax decompression, and spinal immobilisation; paediatric emergency assessment; and clinical triage including referral level determination. Certification is renewed every 3 years with continuing professional development.

Crew Level	Specification
L1→L2 seam (standard ground)	2 paramedics. Standard ALS or 4×4 unit. Full ALS capability: stabilise and transport to correct level.
L2→L3 seam (primary transfer)	2 paramedics + clinical officer. Advanced ALS unit. Obstetric emergency management, trauma surgical preparation, advanced airway — treating in transit, not waiting for arrival.
L3→L4 seam (critical transfer)	Paramedic + nurse or doctor. Helicopter or advanced ground unit. Critical care in transit: ventilator capable, full monitoring, blood

Crew Level	Specification
	product carriage where required.
Post-traumatic stress protocol	Post-traumatic stress monitoring is mandatory for all frontline KNAC personnel — psychological support is a workplace right, not a voluntary benefit. The KNAC psychology programme (jointly designed with ULINZI's NPS mental health service) provides structured debriefing after mass casualty events, routine wellness checks, and confidential treatment access.

5.6 Governance and Financing

The KNAC Director-General is appointed by the President subject to confirmation by a two-thirds majority of all members of the National Assembly. The Director-General serves a single non-renewable 6-year term and cannot be removed except upon a two-thirds National Assembly resolution or criminal conviction. The Corps is a permanent institution of the Republic — its existence is not subject to executive reorganisation, ministerial discretion, or changes in government.

The national protected appropriation funds: national command structure including the NEOC; the air wing operational costs; the KNAC Training Academy; the CHP programme nationally; and the Clan Health Warden programme nationally. County formation operational costs — fleet maintenance, fuelling, station infrastructure, and personnel remuneration — are borne by county governments as a mandatory health budget line. No county government may reduce its Corps formation budget allocation below the national remuneration guide floor without the written approval of both the Director-General and the Cabinet Secretary for Health. Every Corps procurement contract above Ksh 50M is published within 48 hours of execution.

SECTION SIX

The Community and Nomadic Health Programme

6.1 The Cuban Doctrine Applied — Geographic Empanelment

Cuba's achievement — maternal mortality lower than the United States, life expectancy matching high-income countries, all built on a per-capita GDP a fraction of Switzerland's — rests on a single architectural decision: every family is known to the health system before they are sick. The consultorio family doctor and nurse live above their clinic. They know the 150 families in their catchment not as patient records but as people — the pregnant woman at 36 weeks, the elder with hypertension who forgets his medication, the child who was underweight at 6 months. The health system is present before the emergency. Kenya applies this doctrine to the ward scale through the Community Health Paramedic.

6.2 The Community Health Paramedic — Full Programme Design

Programme Element	Design
Recruitment and empanelment	CHPs are recruited from the ward or sub-location in which they will serve. The recruitment criterion is community trust and mother-tongue language fluency — not academic qualification alone. A candidate who grew up in Isiolo North ward, speaks Borana and Swahili fluently, and holds a KNQF Level 3 first-aid certificate is a better CHP for that ward than a clinical officer from Nairobi who speaks only Swahili. Academic training follows selection. Community trust is the qualification that cannot be taught.
Training — Cuban-adapted CHP standard	12-month training programme based at the nearest KNAC Academy satellite facility. Module 1 (3 months): emergency response — basic life support, scene management, triage, stabilisation, KNAC dispatch node operation, motorcycle safety. Module 2 (3 months): community health surveillance — household assessment, disease risk stratification (the Cuban system's four-category risk classification: healthy, at risk, sick, disabled), data recording, antenatal care fundamentals, childhood immunisation, nutrition assessment. Module 3 (3 months): primary health protocols — malaria, URTI, diarrhoea, wound care, oral rehydration therapy, contraception, TB DOTS supervision, basic NCD monitoring (blood pressure, blood glucose). Module 4 (3 months): supervised field placement in their assigned ward under an experienced CHP mentor. KNQF Level 4 on completion. Career pathway: further training leads to KNQF Level 5 paramedic certification — the Cuban model of continuous career advancement within primary healthcare.
Daily household surveillance round (the	Each CHP conducts a structured daily or alternate-day household visit programme — not in response to calls, but

Programme Element	Design
'Cuban round')	proactively. On a normal day they are not responding to emergencies. They are doing their rounds. Visiting the pregnant woman at 36 weeks. Checking the diabetic elder. Following up the child discharged last week. The triple diagnosis at every visit: physical (symptoms, vital signs, medication adherence), psychological (mental health screening, postnatal mood assessment), social (food security, domestic violence risk, children in school). Every visit is recorded in the Community Health Information System on the connected device. The data flows upward: dispensary → health centre → sub-county → national. A cluster of fever cases at one water point becomes outbreak detection before it becomes an epidemic.
Emergency first-response role	When a call comes within their ward radius, the CHP is typically first on scene before the ambulance arrives from the health centre. They stabilise within their training capability, communicate clinical status to the KNAC dispatch node in real time, and guide the incoming ambulance crew to the patient. The ambulance treats. The CHP bought the time. The dispatch system registers the CHP's clinical assessment as the first entry in the patient's care record for this episode — transmitted to the receiving facility before arrival.
Numbers and deployment	Sedentary wards: 2 CHPs minimum per ward. Nomadic and ASAL wards: 4–6 CHPs. Total nationally: approximately 4,400 CHPs at establishment. All are permanently employed — not contracted, not volunteer — with a salary, a pension, a career pathway, and a motorcycle. All are equipped with a connected device linked to the ward dispatch node and the sub-county dispatch centre. CHP employment is through the KNAC — not county government. This protects them from county political interference.
The nation-building function	The CHP speaks the community's mother tongue. They know which households have lost children. They are not an outsider arriving with a government clipboard — they are a neighbour who got trained and came back. The state showing up at the intimate scale, not extracting but checking on you, knowing your name, following up — that makes the state personal. This is nation-building at the household level. The community that is visited by the state for positive reasons — health, welfare, support — participates in the state. They register births, vaccinate children, report outbreaks, and cooperate with the broader development programme. The CHP is the first state presence in many communities' daily lives that is unconditionally there for them.

6.3 The Nomadic and Semi-Nomadic Health Programme

Kenya's 4 million nomadic citizens break every fixed-infrastructure assumption. The dispensary works when the community is there. The CHP with a ward catchment

works when people stay in that ward. Nomadic pastoralists follow seasonal routes that have been consistent for generations — moving between wet-season and dry-season grazing areas, converging at seasonal water points and market days. The solution is not bringing them to the system. It is making the system follow them.

6.4 The Clan Health Warden — Full Programme Design

Programme Element	Design
Selection — trust is the qualification	Clan Health Wardens are nominated by the relevant clan elders and validated by the community they will serve. The Corps does not impose a candidate on a community where the elders have not validated that candidate. The trust is the qualification. A Health Warden that the community does not trust is clinically useless — they will not tell them what is wrong. Training adds capability to existing trust. This is the Cuban community health doctrine applied to nomadic contexts: the health worker is selected by the community, not assigned to it.
Training — intermediate nomadic standard	3-month training programme at the nearest accessible training point (mobile training team, not requiring the candidate to leave their region for extended periods — the KNAC Academy deploys training teams to ASAL regional centres twice per year). Training content is calibrated to the specific health emergencies of the nomadic context: malaria triage and initial treatment, snakebite stabilisation and anti-venom administration (restricted protocol), complicated delivery recognition and immediate management prior to KNAC transfer, trauma assessment and haemorrhage control, dehydration management in children, basic wound care, and — critically — satellite communication device operation, GPS location reporting, and KNAC dispatch protocol. KNQF credit toward CHP certification for wardens who wish to progress.
Equipment	Ruggedised satellite-capable communication device — enabling direct communication with the sub-county dispatch centre from any location in Kenya, including areas with no mobile network coverage. Basic emergency kit: airway management (NPA, pocket mask), haemostatic dressing, tourniquet, IV access kit (with training), oral rehydration salts, antimalarials, first-line snakebite pack, basic wound care supplies, obstetric first-response pack. The device GPS-tracks automatically when activated — the sub-county dispatch centre knows the Warden's location within seconds of a call. Every device is tracked in a national register — 16,000 GPS locations visible at the NEOC at all times.
Numbers and coverage	16,000 Clan Health Wardens nationally — 1 per 250 nomadic persons in the four million nomadic population. A clan unit of 250 nomadic persons always has trained clinical presence travelling with it. The register is maintained by the Corps and updated continuously as clans move and as Warden assignments change with clan leadership succession.

Programme Element	Design
The Enhanced Outreach Worker — location intelligence function	Double the sedentary CHP ratio in nomadic counties: 4–6 per ward equivalent. Their specific additional function is location intelligence. They know which clan is at which water point this week. They feed that continuously into the system. The mobile dispensary and the KNAC helicopter dispatcher always know approximately where every nomadic community is. When help is needed, it has an address. When a mobile dispensary circuit is due, the outreach worker has already mapped who needs what.

6.5 The Mobile Dispensary Programme — 80 Units

Fortnightly or monthly circuits hitting known waypoints — seasonal water points, traditional grazing congregation areas, border market days. Not chasing the community. Meeting them at the places the calendar says they will be. The schedule is co-designed with each nomadic community — the community provides the seasonal movement map, the programme provides the medical team and the schedule.

Element	Specification
Vehicle specification — converted long-wheelbase 4×4	Purpose-built conversion of a Toyota Land Cruiser 79-series (or equivalent) long-wheelbase chassis — the same vehicle used by safari operations in nomadic Kenya, meaning it is already proven for the terrain, already serviced by regional mechanics, and already familiar to ASAL communities. The medical conversion carries: pop-up examination tent (3-person capacity, weather-resistant, fast deployment — 15 minutes for a 3-tent consultation station). Portable generator (4 kW, silent running). Mobile ultrasound (battery-operated obstetric + abdominal). Portable X-ray unit (Year 5 — weight constraints prevent Year 1 deployment). Portable blood analyser (haemoglobin, glucose, malaria RDT, HIV test, pregnancy test). Portable ECG (12-lead). Vaccine cold box (72-hour capacity, solar-charged at base). Essential medicines box (ASAL-specific formulary: antimalarials, antibiotics, ORS, snakebite packs, antihypertensives, insulin, anticonvulsants, oxytocin, misoprostol, wound care). Satellite communication system. Water purification unit. The vehicle carries 3 tents, a generator, a full medicines box, a portable diagnostic kit, and a 4-person team — clinical officer, nurse, community liaison from the specific clan circuit, and driver.
Community co-design of the circuit schedule	Every mobile dispensary circuit is co-designed with the nomadic communities it serves — not imposed on them. The KNAC's Enhanced Outreach Workers in each area map the seasonal movement patterns over 12 months, identifying: dry-season water points where clan groups converge (typically January–March and July–August); wet-season dispersal routes where smaller family groups are more dispersed but more

Element	Specification
	accessible; border market days (Moyale, Mandera, Lokichar, Lodwar, Marsabit, Isiolo — these are already known fixed-date gatherings); and grazing concentration areas following good rains. The resulting schedule is a 12-month calendar agreed with clan elders and outreach workers — the mobile dispensary team knows before they depart exactly who they will find and approximately where.
On-arrival protocol	The community liaison (a member of the specific clan) announces the mobile dispensary visit to clan leaders on arrival. Registration is by KNAC ID or national ID — new registrations accepted on the spot (mobile registration). Triage by community liaison and nurse: identify urgent cases (KNAC emergency protocol activated for urgent cases — the NEOC tracks the mobile dispensary GPS and can dispatch helicopter to the mobile dispensary location if a critical case is identified). Routine consultations by clinical officer. Immunisation by nurse. Maternal health: ANC checks for all pregnant women on the circuit; deliveries anticipated within the fortnight are identified and a plan made — typically facilitating temporary relocation to a Level 2 facility for the delivery period. NCD screening: blood pressure, glucose, BMI for all adults over 40. Data recording: every contact recorded in the Community Health Information System on the vehicle's satellite-connected tablet.
Resupply and reporting	Each mobile dispensary returns to its base facility (a Level 2 or Level 3 within the county) every 2–4 weeks for vehicle maintenance, medicines resupply, cold-chain restocking, data upload (if satellite connectivity was insufficient for real-time upload during the circuit), and team briefing. Circuit health data feeds the national nomadic health surveillance dashboard — the first systematic health data from nomadic Kenya ever collected at this scale.
80 units nationally	80 mobile dispensary units — 1 per approximately 50,000 nomadic population. Units are allocated by the Director-General based on the national nomadic population distribution: Turkana County (highest nomadic population — approximately 15 units); Marsabit, Mandera, Wajir, Garissa (approximately 8–10 units each); Samburu, West Pokot, Isiolo, Tana River, Kilifi (ASAL semi-nomadic populations — 3–5 units each). Units are purchased and maintained by KNAC centrally but operated by county formations.

SECTION SEVEN

The Mental Health Programme — EU Framework, Cuban Staffing

7.1 The Burden

Mental health disorders affect approximately 1 in 6 Kenyans — consistent with the global WHO estimate and the EU's own 1-in-6 figure for the European population. The most prevalent conditions in Kenya are: depression and anxiety (significantly elevated in urban informal settlements, among displaced populations, and in conflict-affected northern counties); PTSD (from intercommunal violence, pastoral raiding, domestic violence, and the slow accumulation of poverty-related trauma); schizophrenia and first-episode psychosis (often presenting late, after years of management by traditional healers, due to absence of accessible community mental health services); postnatal depression (the Jinsia Amendment Schedule's AFY/5 flags this as a specific programme obligation — CHP postnatal screening at 3rd and 4th postnatal visits); substance use disorders (alcohol and khat are the primary substances in most regions; inhalants in urban informal settlements); and dementia (a growing burden as Kenya's population ages, currently almost entirely undiagnosed and unmanaged in the community).

The EU's 2023 Comprehensive Mental Health Communication identifies three pillars: prevention, access to quality care, and reintegration into society after recovery. Kenya's programme adopts all three, with the Cuban staffing model providing the community-level workforce that makes the EU's community care doctrine achievable in a low-resource context. Mental health is not a programme add-on. It is a core component of the five-level hierarchy.

7.2 The Model — Community-Based Care, Not Institutionalisation

The EU's mental health framework explicitly mandates the shift from psychiatric institutionalisation to community-based care — from long-stay psychiatric hospitals toward integrated community mental health teams (CMHTs) providing care close to where people live. This is the model Kenya builds. The 15-bed psychiatric inpatient unit at each Level 4 (specified in Section 3.6) is not a psychiatric institution — it is an acute admission facility for crisis stabilisation. The primary locus of mental health care is the community.

The EU Community Mental Health Doctrine — Kenya Application

COMMUNITY MENTAL HEALTH TEAM (CMHT) AT EACH COUNTY: A team of mental health professionals providing outreach, case management, medication management, psychosocial support, and crisis response in the community — at people's homes and at community locations, not only at hospitals. Low client-to-staff ratio. Continuous 24-hour crisis coverage. Team-based caseload (not individual case management). Long-term care relationship — the same team follows the same patients over years, building the trust that makes treatment adherence possible.

STEPPED CARE MODEL: Mental health support is available at every level of the hierarchy. Level 1 CHP: mental health screening, first-level counselling (basic psychological support), referral. Level 2: mental health clinical officer, group therapy, outpatient psychiatry. Level 3: inpatient acute psychiatry (HDU-equivalent). Level 4: inpatient acute unit (15 beds), CMHT, full specialist psychiatry, rehabilitation. Level 5: complex cases — treatment-resistant conditions, forensic psychiatry, intensive inpatient rehabilitation.

RECOVERY ORIENTATION: The EU framework mandates a recovery-oriented approach — the goal of mental health care is not just symptom management but the person's ability to live a meaningful life in the community. This includes supported employment (NIAS referral pathway for mental health service users), supported housing (Settlement Vision supported tenancy strand), and peer support (trained peer support workers who have lived experience of mental health conditions).

NO COERCION AS DEFAULT: The EU's community mental health doctrine explicitly moves away from coercion — forced admission, forced treatment — as a first-line response. Kenya's psychiatric admission protocol: voluntary admission is always offered first; involuntary admission only where the person poses an immediate risk to themselves or others and voluntary admission has been refused. The Mental Health Tribunal reviews every involuntary admission within 72 hours.

7.3 The Staffing — Cuban Model Applied to Mental Health

Cuba's mental health system is built on the same three-tier community model as its general health system: family doctor-and-nurse team (with mental health screening and basic psychological support), polyclinic (community mental health team), and hospital (acute inpatient). Cuba trains approximately 3 psychiatrists per 100,000 population. The EU average is 12 per 100,000. Kenya currently has fewer than 1 per 100,000. The Cuban training model — free, high-volume, community-oriented — is Kenya's template.

Level	Mental Health Staffing Standard
Level 1 — Dispensary	CHP: mental health first-aid trained. Conducts: depression screening (PHQ-9 in Swahili), anxiety screening (GAD-7), postnatal depression screening at 3rd and 4th postnatal visit (Edinburgh Postnatal Depression Scale in Swahili), alcohol use screening (AUDIT). Refers: anyone screening positive to Level 2 mental health clinical officer within 5 working days. Provides: basic psychological first aid for acute distress, domestic violence safety planning referral, substance use brief counselling.
Level 2 — Health Centre	Mental Health Clinical Officer (KNQF Level 6, 2-year mental health specialisation) — 1 per health centre. Provides: outpatient psychiatry (depression, anxiety, PTSD, common mental disorders), group therapy (CBT-based), medication management (antidepressants, anxiolytics under clinical officer prescribing authority), postnatal mental health follow-up, substance use brief interventions. Refers acute cases (psychosis, mania, active suicidality) to Level 3 via KNAC. Community Mental Health Nurse (KNQF Level 5) from Year 3: the community outreach arm of the

Level	Mental Health Staffing Standard
	Level 2 team, conducting home visits for high-risk community members.
Level 3 — Sub-County Hospital	HDU-level psychiatric observation: 4 beds in the HDU for acute psychiatric crisis (psychosis, mania, severe suicidality) — short-term stabilisation (48–72 hours maximum) before transfer to Level 4 acute unit or discharge to community follow-up. Visiting psychiatrist minimum 2 visits per week (national deployment pipeline, Year 1). Mental Health Nurse × 2 on Level 3 establishment. Social Health Worker trained in mental health: assesses social determinants, family support, housing security for all mental health admissions.
Level 4 — County Referral	Resident Psychiatrist (nationally deployed, 1 from Year 1, 2 from Year 5). County Community Mental Health Team (CMHT): Psychiatrist (1), Mental Health Clinical Officers (2), Mental Health Nurses (4), Occupational Therapist (1), Psychologist (1), Social Worker (1), Community Psychiatric Nurses (3, providing outreach). Total CMHT: 13 professionals. This is the Cuban polyclinic model applied to mental health — the specialist team that the Level 1–2 primary care workers refer to and are supported by. 15-bed inpatient acute psychiatric unit (EU design standard: individual rooms, natural light, garden, therapeutic common areas, no institutional corridor design — see Level 4 specification in Section 3.6).
Level 5 — National Referral	Complex and treatment-resistant mental health conditions requiring Level 5 intervention: treatment-resistant depression (ECT programme), treatment-resistant schizophrenia (clozapine initiation and monitoring), forensic psychiatry (MTRH leads this mandate), severe eating disorders, intensive inpatient rehabilitation for chronic severe mental illness. Liaison psychiatry at all three Level 5 hospitals — embedded psychiatry team working with other specialties (oncology, cardiology, ICU) where mental health comorbidity is highest.

7.4 The Mental Health Training Pipeline

Kenya needs approximately 500 psychiatrists (1 per 100,000 population for the Cuban baseline, 5 per 100,000 for the EU standard — Kenya's Year 20 target). Currently approximately 80 psychiatrists are registered in Kenya. The gap is bridged through: (1) expansion of MBChB psychiatry residency intake at UoN, Moi, and Egerton from current 10/year to 50/year by Year 5; (2) expansion of Mental Health Clinical Officer training at Kenya Medical Training Colleges — 200/year intake by Year 3; (3) expansion of Mental Health Nurse training — 300/year by Year 3; (4) Cuba-Kenya mental health training exchange: 50 Kenyan mental health clinical officers per year trained in Cuba's community mental health system for 18 months, returning with the specific community outreach and crisis response skills that Kenya's CMHT model requires.

SECTION EIGHT

Pharmaceutical Procurement Reform

8.1 The Problem — KEMSA's Structural Failures

The Kenya Medical Supplies Authority (KEMSA) has been the subject of five separate parliamentary and auditor-general investigations in the past decade. Each investigation found the same problems: procurement fraud inflating unit prices above market rates; selective delivery favouring politically-connected facilities; a push model (sending supplies without reference to actual consumption) rather than a pull model (supplying based on documented facility consumption); absence of a consumption-tracking system capable of predicting and preventing stockouts; and parallel procurement by counties duplicating KEMSA at higher cost because KEMSA is unreliable.

The consequences are measurable and lethal: Kenya's most common hospital drug expenditure failure is running out of oxytocin during the management of a post-partum haemorrhage. Oxytocin costs Ksh 40 per ampoule. A woman dies because Ksh 40 is not on the shelf — not because it is unavailable in Kenya, but because KEMSA's distribution failed and the facility did not have an independent emergency stock protocol.

The Reform Doctrine

The essential medicines supply chain is a life-safety system. It is managed with the same institutional independence, transparency, and performance accountability as the KNAC. It is not a procurement agency. It is a medical logistics corps.

The model: Ghana Health Service's Pharmacy Directorate, which resolved the same structural failure in 2013 through: a consumption-based ordering system (pull not push); public monthly stockout reporting by facility; an independent logistics corps separate from the political procurement function; and emergency buffer stocks at every facility.

8.2 The Reformed Architecture — Kenya Pharmaceutical Logistics Corps (KPLC)

Element	Design
Institution — KPLC as successor to KEMSA	KEMSA is restructured as the Kenya Pharmaceutical Logistics Corps — an independent statutory body on the KNAC model. The KPLC Director is appointed by the President subject to two-thirds parliamentary confirmation, 6-year non-renewable term, cannot be removed by a Cabinet Secretary. The KPLC's mandate: procure, warehouse, and distribute every medicine and medical consumable on the Kenya Essential Medicines List to every public health facility in Kenya, on time, every time. The KPLC publishes every procurement contract above Ksh

Element	Design
	5M within 48 hours of execution.
Consumption-based pull system	Every Level 1–5 facility records every medicine dispensed in the Community Health Information System. The KPLC's logistics system reads every facility's consumption data in real time. When a facility's stock falls below the 8-week buffer (the standard for rural facilities in the Ghana model), the KPLC automatically initiates a resupply order without the facility needing to request it. The push model — sending whatever the planners decide without reference to actual consumption — is abolished from commencement. Stockout is a system failure, not a facility failure.
Emergency buffer protocol	Every facility maintains a 4-week emergency buffer of the 20 most critical life-saving medicines: oxytocin, magnesium sulphate, misoprostol, amoxicillin (oral and injectable), gentamicin, metronidazole, anti-malarials (artemether-lumefantrine and artesunate IV), oral rehydration salts, oral morphine, antiepileptics (diazepam and phenobarbital), insulin (short and long-acting), anti-TB first-line drugs, ARVs (first-line adult and paediatric), and IV fluids (normal saline and Ringer's lactate). The 20 Critical Medicines are always present. No facility runs out of oxytocin. This is not aspirational — it is a performance standard with published monthly compliance reporting.
Price transparency and EAC joint procurement	Every KPLC procurement price is published in the Kenya Medicine Price Register — available to any county, any NGO, any facility manager, and any journalist to compare against international reference prices (MSF, GlobalFund procurement benchmarks, and UNICEF supply division prices). Any contract price exceeding the international benchmark by more than 15% requires a written justification published alongside the price. EAC Joint Pharmaceutical Procurement: Kenya leads the EAC health integration protocol's joint procurement window (Diplomasia ya Taifa, Section 3.7.5). KPLC represents Kenya in the EAC Joint Pharmaceutical Procurement Agency — pooling all eight EAC member states' procurement volumes to achieve the price reductions that Gavi achieves for vaccines. The EAC pool's purchasing power makes Kenya's prices lower than Kenya can achieve alone.
Domestic pharmaceutical manufacturing pipeline	Viwanda ya Taifa identifies pharmaceutical manufacturing as a strategic priority. KPLC's procurement policy: for any medicine on the Kenya Essential Medicines List that is manufactured domestically to WHO GMP standard, KPLC buys domestic first — up to a 20% price premium over the cheapest imported equivalent is acceptable to protect domestic manufacturing capacity while it scales. This explicit buy-domestic clause applies from Year 3 (when the first domestic pharmaceutical manufacturing investments are operational). By Year 15, Kenya produces 40% of its essential medicines domestically — the intermediate milestone on the path to

Element	Design
	pharmaceutical independence.
Cold chain infrastructure	Every Level 1 has a solar vaccine refrigerator. Every Level 2 has a solar walk-in cold room. Every Level 3 and above has a dedicated pharmaceutical cold room meeting WHO cold chain standards. The KNAC's air wing cold chain capability — KNAC bases co-located with vaccine and cold-chain-sensitive medicine distribution points — means that rural facilities receive cold chain medicines by KNAC logistics run, not by commercial transport that breaks the cold chain.
Mental health medicine protocol	All mental health medicines — antipsychotics, antidepressants, mood stabilisers, benzodiazepines under protocol, antiepileptics — are on the KPLC essential medicines list and are available at every Level 2 and above. A patient with schizophrenia who is stable and living in the community should never experience a relapse because their olanzapine was out of stock at the health centre. The 20 Critical Medicines protocol includes the top 5 psychotropic medicines.

SECTION NINE

The Insurance Financial Architecture — NHS Model, Kenya Adaptation

9.1 The Five Failures of Previous Insurance — Not Repeated

Kenya has tried national health insurance five times. Each failure is named in the Health Insurance Brief and each must be explicitly designed against in the architecture that follows:

Previous Failure Mode	How the New Architecture Avoids It
1. Coverage gap — millions uninsured and paying out of pocket at the worst possible moment	Universal mandatory coverage from birth. No opt-out. No exclusion by employment status, geography, income, or pre-existing condition. Like the NHS, you are covered because you are in Kenya — not because you work, not because you paid last month.
2. NHIF as a corruption vehicle — collected premiums, created obligations it could not honour	Parliamentary-confirmed Director-General on KNAC governance model (6-year non-renewable term, cannot be removed by Cabinet Secretary). Protected appropriation. 48-hour publication of all contracts above Ksh 50M. Actuarial solvency from inception — reserve fund equal to 6 months of projected claims at all times as a statutory floor.
3. Predatory private insurance in a non-competitive market	Cost-based facility payment replacing fee-for-service. The Level Specification defines the maximum cost at each level. No facility may bill the KNHI fund more than the Level Specification cost standard for the service provided. The insurer knows the cost in advance. Predatory billing on a captive patient becomes structurally impossible.
4. Employer-linkage excludes the informal sector	Contribution is decoupled from formal employment. The informal sector is the design case. Contribution for informal workers: mobile-money monthly contribution, linked to national ID, defaulting to the subsidised rate for low-income earners. No employer signature required. No payslip required. A boda-boda rider contributes Ksh 500/month from M-Pesa. They are covered.
5. Actuarial vacuum — insurance priced without defined costs, routing, or population data	The Level Specification provides defined costs at each level. The KNAC provides predictable referral routing. The 4,400 CHPs generate the population health data. The actuarial vacuum is filled by the health architecture. The insurance scheme is designed after the architecture — precisely as the Insurance Brief recommended.

9.2 The Kenya National Health Insurance Scheme — Design

Design Element	Specification
Founding principle —	The Kenya National Health Insurance Scheme (KNHI) is

Design Element	Specification
NHS model	founded on the NHS principle: comprehensive, universal, free at the point of delivery. Every Kenyan is covered from birth. The scheme covers all clinical services at all levels of the five-level hierarchy. There is no benefit package exclusion for common chronic conditions (diabetes, hypertension, TB, HIV/AIDS, mental health). The scheme covers the full cost of care at the appropriate level — including medicines, diagnostics, and surgical procedures. It does not cover elective cosmetic procedures, private room upgrades, or experimental treatments without a Technology Assessment approval.
Universal coverage — 'You are Kenyan, you are covered'	Coverage is automatic from birth and linked to national ID. A person who has never made a contribution is covered at the subsidised rate — their contributions are paid by Treasury from the Subsidised Access Fund. No Kenyan presents at a facility without coverage. The scheme's default position is coverage, not exclusion. Administrative denials — a claim rejected because the patient's contribution was in arrears — do not suspend clinical care. Care is provided first. The administrative question is resolved separately.
Contribution architecture — three streams	Stream 1 — Formal employment: 2.75% of gross salary from employee + 2.75% from employer = 5.5% of payroll. Deducted at source (PAYE equivalent), remitted monthly by employer to KNHI. Stream 2 — Informal/self-employed: Ksh 300–1,500/month on a 6-band income scale, collected via mobile money (M-Pesa, Airtel Money, T-Kash) linked to national ID. The default band for unverified income is Ksh 500/month — affordable for most informal workers. Stream 3 — Government subsidised coverage: Treasury contributes Ksh 200/month per person for Kenyans below the poverty line (approximately 30% of the population at programme start, declining as the employment programme creates formal sector growth). Total government subsidy: approximately Ksh 180B/year at Year 1, declining to Ksh 90B/year by Year 10 as formal employment grows.
Catastrophic expenditure cap	No Kenyan household pays more than 8% of annual household income on health costs in any 12-month period. The scheme absorbs all costs above this threshold. This is the primary protection against health-induced poverty — the purpose of the insurance scheme is not primarily to pay routine costs (which the scheme also covers) but to prevent the catastrophic health spending that destroys household economic security. The 8% cap is lower than the WHO-recommended 10% threshold, reflecting Kenya's income distribution.
Integrated County Health Board (ICHB) commissioning model	The KNHI fund allocates a per-capita budget to each of Kenya's 47 Integrated County Health Boards. The ICHB holds the health budget for its county population and commissions services from registered public and private health facilities through contracts based on the Level Specification cost standard. This is the NHS Integrated Care Board model

Design Element	Specification
	adapted to Kenya's 47 counties. The ICHB: plans health services for its population; contracts Level 1–4 facilities; manages the county CMHT; coordinates with KNAC on referral pathway enforcement; and publishes an annual health service report for the county population. The ICHB Director is appointed by the county governor, serves a fixed 4-year term, and reports to the KNHI board.
Facility payment — cost-based, not fee-for-service	Facilities are reimbursed by the ICHB at the Level Specification cost standard for the service provided — not at whatever the facility chooses to bill. A Level 3 outpatient consultation is reimbursed at Ksh 650. A Level 3 uncomplicated C-section is reimbursed at Ksh 45,000. These rates are set by the KNHI actuary based on the Level Specification costs, reviewed annually, and published publicly. A facility that bills more than the specification rate is committing fraud. A facility that provides fewer services than the specification requires is failing its compliance obligation. Both are enforced.
Transition from SHIF	The Social Health Insurance Fund (SHIF) is the current institution. SHIF is not abolished — it is transformed into KNHI through a 3-year legislative transition. Year 1: KNHI Act passed; KNHI board and Director-General appointed; actuarial modelling completed; contribution collection system (mobile money integration) built. Year 2: SHIF contributions migrate to KNHI; KNHI begins paying facilities against Level Specification cost standard; ICHB structure established. Year 3: full KNHI operational; SHIF wound down; legacy SHIF obligations honoured from KNHI reserves. Existing SHIF subscribers do not lose coverage during transition.
Actuarial sustainability — the reserve floor	The KNHI maintains a claims reserve equal to 6 months of projected annual claims. This reserve is a statutory floor — it cannot fall below 3 months without automatic Treasury injection. The reserve is invested in Kenya government securities (long-term, low-risk, supporting the domestic bond market). The KNHI actuary publishes a quarterly Actuarial Soundness Report accessible to the public. NHIF's failure was partly actuarial — reserves were depleted without public visibility. The quarterly publication means Parliament, the public, and the media see the reserve level in real time.

SECTION TEN

The Training and Staffing Pipeline — Twenty Years

10.1 The Gap and the Plan

The Level Specification in Section 3 defines what every facility needs. This section defines how Kenya produces the people to staff it. The gap between Kenya's current health workforce and the Year 20 target — Swiss spatial standard, Cuban community staffing, EU mental health provision — is large. It is closed not by magic but by a 20-year production plan that begins with the constraints of Year 1 and steadily narrows the gap through training expansion, deployment reform, and regional cooperation.

Cadre	Current Density (per 10,000 pop)	Year 1 Target	Year 10 Target	Year 20 Target (Swiss-adjacent)
Medical doctors (MBChB and equivalent)	1.1	2.0	5.0	8.0
Registered Nurses and Midwives	8.0 (Nurses), 0.3 (Midwives)	12.0 (Nurses), 1.0 (Midwives)	30.0 (Nurses), 3.0 (Midwives)	60.0 (Nurses + Midwives combined — approaching Swiss 18.8/1,000 = 188/10,000)
Clinical Officers	3.5	4.5	8.0	10.0
Community Health Paramedics (CHPs)	0.0 (current)	0.9 (4,400 nationally)	1.8 (9,000 nationally)	2.5 (12,500 nationally)
Psychiatrists	0.07	0.1	0.5	1.5
Laboratory Scientists and Technicians	0.8	1.5	4.0	8.0
Radiographers	0.3	0.6	2.0	4.0

10.2 The Medical Training Expansion

Kenya currently has 9 medical schools producing approximately 1,200 MBChB graduates per year. The Year 10 target requires approximately 3,500 graduates per year. The Year 20 target requires approximately 5,000. This requires a tripling of medical school capacity over 20 years — achievable through the expansion of existing medical schools and the establishment of new county-linked medical colleges. All training is integrated with the KNQF and leads to recognised qualifications at the appropriate level.

Institution	Training Role and Expansion
University of Nairobi College of Health Sciences	Primary training institution for specialist medicine, surgery, and subspecialties. MBChB intake expanded from current 400 to 1,200/year by Year 10. Nursing intake expanded from current 500 to 2,000/year by Year 10. Allied health (laboratory, radiography, physiotherapy, pharmacy) expanded proportionally. The UoN teaching hospitals — KNH and the UoN satellite hospitals — serve as the Level 5 and Level 4 training environment. UoN leads Kenya's contribution to the EARUC (East African Research Universities Consortium) health research agenda.
Moi University School of Medicine	Western Kenya, Rift Valley, and Northern catchment training. MBChB intake expanded to 600/year by Year 10. MTRH teaching hospital embedded. Moi University's AMPATH research partnership preserved and expanded — one of Africa's most important HIV treatment research programmes. Moi leads the national psychiatry residency programme expansion.
Egerton University — Health Sciences College	New Health Sciences College established at Egerton (Year 3), serving the agricultural and ASAL heartland. MBChB from Year 5. Priority: Community Medicine and Public Health, Tropical Medicine, Rural Health — the specialties that the Statutory Deployment Formula posts to Grade 4–5 counties. Egerton University Agricultural Enterprise model applied: student doctors rotate through ASAL health facilities as part of the clinical curriculum, building the community health experience from Year 2 of training.
County Medical Colleges — 10 new facilities	10 new Medical Training Colleges at county level (one in each cluster of 4–5 counties), each producing Clinical Officers (3-year programme, KNQF Level 6), Registered Nurses (3-year programme, KNQF Level 5), Community Nurses (2-year programme, KNQF Level 4), Community Health Paramedics (1-year programme, KNQF Level 4), and Health Records Officers (2-year programme, KNQF Level 4). KSBC delivers the building. County government runs the college. MoH accredits the curriculum. Combined additional intake: 4,000 clinical officers + 8,000 nurses + 3,000 CHPs per year by Year 10.
Existing Kenya Medical Training Colleges (48 KMTCs)	KMTCs are the primary production system for clinical officers and nurses — 48 campuses nationally. Intake expanded by 50% by Year 5 through physical expansion (KSBC builds the additional facilities), faculty expansion (senior Clinical Officers on permanent lecturer contracts), and curriculum reform (KNQF-aligned, competency-based assessment replacing examination-based assessment). 30 of the 48 KMTCs gain accreditation for their highest diploma to articulate into the university degree programme (KNQF Level 6 → Level 7) without additional entry examination.
KNQF Integration — the pathway from ward to	Every health professional qualification is on the KNQF. The pathway from community health assistant (KNQF Level 3) to

Institution	Training Role and Expansion
professor	Medical Officer (KNQF Level 7) to Specialist (KNQF Level 8) to Subspecialist Professor (KNQF Level 10) is continuous. Prior learning credit allows a Clan Health Warden (community-trained intermediate standard) to credit that training toward the CHP qualification (KNQF Level 4). A CHP can train to paramedic (Level 5). A paramedic can train to Clinical Officer (Level 6). A Clinical Officer can train to Medical Officer (Level 7). No dead ends. The pathway from the nomadic grazing area to the surgical theatre exists for every Kenyan who wants to walk it.
Cuba-Kenya Medical Training Exchange	100 Kenyan medical and nursing students per year train in Cuba for 2 years as part of their clinical curriculum — a partnership modelled on the South-South medical education cooperation that Cuba has provided to Latin America and Africa for 40 years. Cuba's School of Medicine for Latin America (ELAM) has a proven model. The Kenyan cohort returns with the community health doctrine embedded in their clinical practice from their first years. In parallel, 50 Cuban medical educators per year are embedded in Kenyan medical training institutions — teaching the Cuban primary health methodology directly to Kenyan faculty, building the institutional knowledge permanently rather than dependence on continued Cuban presence.

10.3 The Nursing Production Plan

Kenya needs approximately 250,000 registered nurses by Year 20 to approach the Swiss standard of 18.8 nurses per 1,000 in a population of approximately 70 million by 2044. This requires training approximately 12,000 registered nurses per year from Year 5 onward, up from the current estimated 5,000 per year. The 48 KMTCs plus 10 new County Medical Colleges provide the volume. The critical constraint is not buildings — it is qualified nurse educators. Kenya's nursing faculty expansion plan: 500 Masters-qualified nurse educators per year entering the teaching workforce from Year 3 onward, trained at UoN, Moi, and the Nursing Council of Kenya's accredited postgraduate programme.

The nurse-to-doctor ratio target of 4.1:1 (Swiss standard) is maintained throughout the 20-year production plan. Every 1 additional doctor requires 4 additional nurses to be trained and deployed. The plan produces doctors and nurses in this ratio from Year 1. The temptation to expand medical school intake without equivalent nursing expansion — a common failure of health workforce planning — is resisted explicitly.

10.4 The Specialist Production Plan

Kenya currently has approximately 2,000 registered specialists. The Level Specification requires approximately 1,000 resident specialists at Level 4 facilities alone (47 counties × average 21 specialists per county by Year 5). The specialist production plan requires a 50% increase in postgraduate medical training capacity from Year 1.

Specialty	Year 1 Accredited Training Posts	Year 5 Target Posts	Statutory Deployment Formula Grade
Internal Medicine	120	300	Grades 2–5 (all counties)
General Surgery	80	200	Grades 2–5
Obstetrics and Gynaecology	100	250	Grades 2–5 — all Level 4 and high-volume Level 3
Paediatrics	100	250	Grades 2–5
Anaesthesia	80	200	All facilities with operating theatres
Psychiatry	25	100	Grades 4–5 priority — rural CMHT staffing
Radiology	40	120	Grades 2–5 — supported by teleradiology in remote
Orthopaedic Surgery	40	100	Grades 3–5
Ophthalmology	30	80	Grade 3–5 priority — preventable blindness burden
Oncology	20	60	County Level 4 oncology programmes
Emergency Medicine	30	100	Level 3 and Level 4 emergency departments
Family Medicine / Community Medicine	40	150	All levels — the Cuban specialist that sits above the primary care system

SECTION ELEVEN

The Twenty-Year Trajectory

11.1 Phase by Phase

Phase / Year	Health System Milestones
Year 1 — Foundations	KNAC Corps Act commences. Director-General appointed, confirmed by Parliament. NEOC operational. First 500 ambulances deployed. CHP first cohort (1,000) in training. KPLC Act passed — KEMSA transition begins. KNHI Act passed — actuarial modelling commenced. KNHI contribution collection (mobile money) launched. SHIF begins migration. First 30 Level 3 hospital upgrades contracted to KSBC — priority: the 30 sub-county hospitals with the highest maternal mortality in Kenya. First 10 County Medical Colleges contracted to KSBC — priority: the 10 counties with the greatest health workforce deficit. 80 mobile dispensary units procurement commenced.
Year 2	2,650 KNAC fleet fully deployed. All 4,400 CHP first cohort deployed. 16,000 Clan Health Warden programme fully operational — satellite devices delivered. 80 mobile dispensary units operational. Level 1 compliance survey: first annual Level Specification assessment of all 1,450 dispensaries — results published publicly. KNHI board fully constituted. KNHI actuarial modelling complete — contribution rates set and published. Level 3 upgrade programme: first 30 hospitals upgrading.
Year 3	KNHI full launch — all Kenyans covered from Year 3. SHIF wound down. KPLC operational — consumption-based supply system live for all Level 1–3 facilities. First 20 Critical Medicines stockout rate: target below 5% nationally. First County Medical Colleges operational — first CHP and community nurse cohorts in training. Northern NRH site selection and design completed by KSBC Design Studio.
Year 5	All 290 Level 3 hospitals upgraded to Level Specification (Years 1–5 construction programme). Every Level 3 has: 2 functioning operating theatres, blood bank, digital X-ray, ultrasound, full laboratory, HDU. Trust Loop assessment: patient bypass rate at Level 3 measured — target 30% reduction in KNH case volume from conditions treatable at Level 3. Northern NRH commissioned at Isiolo. KNAC helicopter fleet fully deployed — 40 night-capable helicopters at 20 bases. First 47 Level 4 county referral hospitals: all have resident specialist complement (medicine, surgery, OBGyn, paediatrics, anaesthesia) in place via Statutory Deployment Formula.
Year 8	Level 4 full specialist complement — all 47 county referral hospitals meeting Level 4 specification including oncology day programme and dialysis. CT scanners at all 290 Level 3 hospitals. KNHI actuarial sustainability confirmed — 6-month reserve floor maintained. Nurse density: 3.0 per 1,000 (from baseline 0.8). Doctor density: 4.0 per 1,000 (from baseline 0.11 in rural areas).

Phase / Year	Health System Milestones
	Mental health: all 47 counties have a functioning Community Mental Health Team. Pharmaceutical: domestic pharmaceutical manufacturing producing 20% of essential medicines.
Year 10	The Trust Loop broken — quantified. Patient bypass rate at Level 3 down 60% from baseline. KNH managing only genuine rare complexity. Maternal mortality: 150 per 100,000 (from baseline 342). Life expectancy: 72 years (from current 67). KNHI financial sustainability: contributions covering 70% of costs, Treasury subsidy declining to 30%. Universal health coverage index: above 70 (from current 56). All 4,400 CHPs operational, generating the first complete national epidemiological surveillance dataset ever collected in Kenya's history.
Year 15	Swiss Level 3 standard achieved at 100 of the 290 sub-county hospitals. MRI available at all 47 Level 4 hospitals. Doctor density 6.0 per 1,000. Nurse density 10.0 per 1,000. Pharmaceutical: 35% of essential medicines produced domestically. Mental health: psychiatrist density 1.0 per 100,000. Maternal mortality: 80 per 100,000. KNHI: financially self-sustaining with treasury subsidy below 20%.
Year 20 — The Vision	Doctor density 8.0 per 1,000. Nurse density approaching Swiss standard (18.8 per 1,000 is the target — Kenya reaches 15.0 per 1,000 by Year 20). Every Level 3 facility built to Swiss spatial standard. Every Level 4 with full specialist complement and all services. All three Level 5 facilities functioning to international standard. Maternal mortality: 50 per 100,000 (from baseline 342). Life expectancy: 78 years — approaching high-income country standards. KNHI: universal coverage sustained, financially stable. Pharmaceutical: 50% domestic production of essential medicines. Mental health: community-based care model fully operational across all 47 counties. No Kenyan is outside the health system.

11.2 The Governance Indicators — Published Quarterly

Indicator	Baseline (2026)	Year 10 Target	Year 20 Target
Maternal mortality (per 100,000 live births)	342	150	50
Under-5 mortality (per 1,000 live births)	41	20	8
Doctor density (per 1,000 population)	0.11 (rural) / 2.0 (urban)	0.5 (rural) / 4.0 (urban)	0.8 (rural) / 8.0 (urban)
Nurse density (per 1,000 population)	0.8 (rural) / 4.0 (urban)	3.0 national	15.0 national
KNAC response time compliance (%	~35%	80%	95%

Indicator	Baseline (2026)	Year 10 Target	Year 20 Target
of calls meeting standard)			
Level 3 C-section availability 24/7 (% of 290 hospitals)	~30%	80%	100%
Essential medicines stockout rate (20 Critical Medicines)	~40% of facilities have at least 1 stockout per month	below 5%	below 1%
Universal Health Coverage index (WHO scale 0–100)	56	70	85
Out-of-pocket health spending (% of total health spend)	26%	12%	5%
Mental health: % population with access to CMHT within 30km	~5%	40%	90%
Vaccine coverage — DTP3 (% children under 1)	78%	90%	98%
Children who have ever seen a health worker (CHP round)	~25% of rural children	80%	99%

The Closing Doctrine — from the Kenya Health Vision

Rebuild the hierarchy first. Every other investment in the health system is partially wasted without a functioning referral architecture. The hierarchy is the framework within which every other intervention operates.

Connective tissue before facilities. Build the ambulance network. An operational ambulance corps immediately makes every existing facility more efficient — cases arrive at the right level, Kenyatta stops drowning, lower levels start functioning as designed.

The system sees before it acts. Every health system in the world is reactive. The Community Health Paramedic makes Kenya's system predictive. The data collected door to door, household by household, is the most valuable epidemiological dataset Kenya has ever had.

No Kenyan is outside the system. The nomadic programme is not special provision for a marginal population. It is the proof that the system means what it says. The hardest case defines the standard.

The state is personal. The ambulance proves the state will come when you call. The Community Health Paramedic proves the state was already thinking about you before you had to call. Together they make the state present at the scale where people actually live their lives. That presence is the foundation of social trust.

Universal coverage is not generosity. It is the condition under which everything else works. The system that saves your life must not be the system that ruins it.

AFYA YA TAIFA — Kenya National Health Vision. *Kenya National Development Programme. Integrates: Kenya Health Vision, KNAC Corps Act, Kenya Health Insurance Brief.*

This document integrates three previously separate documents — the Kenya Health Vision, the Kenya National Ambulance Corps Act, and the Kenya Health Insurance Brief — into a single comprehensive architecture. The KNAC Corps Act remains the operative legal instrument for the Ambulance Corps; this document synthesises and extends its architectural context. All other programme documents that reference Afya ya Taifa reference this document. Design standards: Switzerland (spatial and equipment), Cuba (primary healthcare staffing and community doctrine), United Kingdom NHS (insurance financing model).

PROGRAMME INTEGRATION APPENDIX

Afya ya Taifa — National Health — Cross-Programme Integration and Employment Summary

Employment Summary

Institution / Role	Permanent	Entry-Level	Entry Qualification and Pathway
KNAC Corps fleet staff	25,000	6,000	Emergency medical technicians, ambulance drivers, dispatch operators — KNQF Level 4, 12-month KNAC Academy training. Entry: Form 4 + KNAC Academy competitive selection.
Community Health Paramedics (CHPs)	4,400	4,400	ALL entry-level. Ward-based, recruited from served communities. KNQF Level 4, 12-month training. Entry: Form 4 certificate + community nomination by ward committee.
Clan Health Wardens	16,000	16,000	ALL entry-level community health roles. Nominated by clan elders, trained in-post by CHP supervisors. Pathway to CHP. No prior formal qualification — training provided.
Nurses and clinical staff (programme-enabled new positions)	50,000	30,000	Ward nurses, community nurses, health assistants — KNQF Level 4–5. Entry: Kenya Registered Community Health Nursing (KRCHN) 3-year diploma minimum.
Mobile Dispensary Teams (80 units)	320	320	ALL entry-level. Clinical officer, nurse, community liaison, driver per unit — recruited from ASAL communities served. KNQF Level 4–5.

Employment Summary	Figure
Total permanent positions (Year 10 steady state)	~95,720
Entry-level positions	~56,720
Reference	Programme Integration Index Section Two — full register with all 48 institutions

Cross-Programme Linkages

Every linkage below names the specific institution, data system, or instrument that creates the interface. Vague linkages are not listed — only confirmed, operational connections.

Links To	Specific Linkage — What Flows Between Documents
Chakula na Lishe	CHP monthly household visits include: MUAC (mid-upper arm circumference) measurement for children under 5, dietary diversity screen, school feeding participation flag. CHP data feeds KFSEWS nutrition surveillance arm. KMNC (Kenya Minimum Nutrition Criteria) standards govern all food provided in health facilities. KFSA food safety standards cover hospital catering supply chains.
Jamii na Ustawi	Ward Home Care Workers are permanent SMC posts designed in Jamii — they provide daily welfare checks and domestic assistance to elderly persons. KNAC mobile dispensary routes coordinate with CHPs' monthly visit schedules. CHP death records feed the National Social Protection Dashboard death registry integration (automatic USP/CB payment suspension within 24 hours). The Carer's Allowance supports unpaid family carers who supplement CHP coverage.
Sayansi na Teknolojia	KEMRI (KRA Institute 2) — pharmaceutical pipeline: drug candidates to KEMRI clinical trial initiation target under 5 years. KEMRI-Pharmaceutical Manufacturing Pipeline Committee connects KEMRI research to Viwanda ya Taifa's pharmaceutical manufacturing programme. KSSMI (KRA Institute 13) at Iten — sports medicine integrated with KNAC pre-competition medical support for elite athletes.
Usafiri wa Taifa	KNAC fleet logistics: 2,650 vehicles require fuel supply chains, maintenance infrastructure, and routing that interfaces with the national road network (KRCC maintained) and the KRC corridor access points. KNAC air wing at Wilson, Mombasa Moi, Kisumu, and Eldoret requires KCAA coordination (managed through KAF airspace agreement).
Ulinzi na Usalama	KAF-KNAC airspace coordination: standing airspace access agreement, dedicated KNAC air emergency frequency, night operations protocol, mass casualty air coordination protocol. CMMC Framework: KDF medical facilities in Moyale, Mandera, Wajir, Garissa, Lodwar serve civilian populations — costs

	reimbursed from Health budget. KDF Medical Corps knowledge transfer to KNAC Academy (joint training module, officer secondments, annual mass casualty exercises).
Ardhi ya Taifa	All new health facility sites cleared through PILG desk. Level 3 hospital upgrades on existing sites: title verification through ArdhiSasa before KSBC mobilises. KNAC ambulance base sites (47 county, 290 sub-county, 1,450 ward forward bases) all require PILG clearance or existing public land designation.
Mfumo wa Katiba	Constitutional Amendment 7 (Article 206D): KNAC 1% national revenue protected appropriation + no-charge provision (constitutional right to emergency medical care without payment). KNAC Corps Act is Tier 1 Year 1 legislation. Article 43 right to health is the constitutional basis for the entire programme.

Legal Instruments and Constitutional Protection

Legal Instrument	Year	Pathway
Kenya National Ambulance Corps Act	Year 1	Simple majority + 2/3 NA for DG confirmation
Constitutional Amendment 7 — Article 206D, KNAC 1% + no-charge provision	Year 4	Article 368(1)
Kenya National Health Insurance Act (KNHI) — successor to SHIF	Year 1	Simple majority
Kenya Pharmaceutical Manufacturing Act (enables KEMRI-Viwanda pipeline)	Year 3	Simple majority

Live Metrics and Accountability

Full cross-reference detail: Programme Integration Index (PII) — Section One cross-reference map, Section Two employment register, Section Three legal instrument index. **Live metrics:** KNHI Community Health Information System. Daily: KNAC response time per county (target: Urban 20 min, Peri-Urban 45 min, Remote 60 min). Monthly: CHP household visit coverage, MUAC rates by ward, vaccination coverage, maternal mortality by county. Alert: any county with KNAC response time exceeding target for 3 consecutive days triggers automatic KNAC DG review.